

## CLAIMS

1. Method of distributing communications established by radio-communication terminals (13), within a geographic cell (10) of a radio-communication network, said geographic cell being sub-divided into at least two geographic sectors (111, 112, 113 ; 111', 112', 113'), characterized in that it comprises a step of modifying (45 ; 45'), by rotation, the orientation of the sectors within said cell.
- 5 2. Method according to Claim 1, characterized in that said modification step is implemented in accordance with at least one of the techniques belonging to the group comprising:
  - the mechanical rotation of transmission antennae and/or reception antennae (311, 312), each of the antennae being associated with one of said sectors of the said cell ;
  - the reconfiguration of at least one network of smart antennae, each of the beams being associated with one of said sectors of said cell.
- 10 3. Method according to any one of Claims 1 and 2, characterized in that said modification step is implemented if at least one command criterion for said rotation is satisfied.
- 15 4. Method according to Claim 3, characterized in that said at least one command criterion for said rotation belongs to the group comprising :
  - the total rate of at least one of said sectors is greater than a predetermined total rate ;
  - the number of links established in at least one of said sectors is greater than a predetermined number of links.
- 20 5. Method according to Claim 4, characterized in that said modification step is only implemented if at least one of the following conditions is verified :
  - the total rate of at least one of said sectors is less than said predetermined total rate ;
  - the number of links established in at least one of said sectors is less than said predetermined number of links.
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6. Method according to any one of Claims 1 to 5, characterized in that it comprises the following successive steps:

- Step A : detection of the sector or sectors of said cell for which at least one command criterion is satisfied ;
- Step B : selection, from among the detected sector or sectors, of one sector in accordance with a first predetermined strategy ;
- Step C: determination of a sector, from among the sectors adjacent to said selected sector, in accordance with a second predetermined strategy ;
- Step D (45, 45'): modification, by rotation, of the orientation of the sectors of the cell through one predetermined angular step, from said selected sector towards said determined adjacent sector in a way that creates new sectors within said cell ;
- Step E : detection of the new sector or sectors of said cell for which at least one tracking criterion relating to said selected sector is satisfied ;
- Step F : if no new sector has been detected during Step E, reiteration of Step D ; if not, a new position for the sectors of said cell is established (48, 48').

7. Method according to Claim 6, characterized in that said first predetermined strategy consists of selecting the sector for which the total rate and/or the number of established links is the greatest (42, 42'), in that said predetermined second strategy consists of determining the sector adjacent to said selected sector for which the total rate and/or the number of established links is the least (44, 44'), and in that said at least one tracking criterion relating to said selected sector belongs to the group comprising:

- the total rate of said detected sector is greater than or equal to the total rate of said selected sector ;

- the number of links established in said detected sector is greater than or equal to the number of links established in said selected sector.

8. Method according to any one of Claims 4 to 7,  
5 characterized in that, said cell being sub-divided into three sectors, said modification step is not implemented if two sectors have an identical total rate and/or an identical number of established links, said total rate and/or said number of established links being respectively greater than said  
10 predetermined total rate and/or said predetermined number of links.

9. Method according to any one of Claims 1 to 8,  
15 characterized in that, in the course of said modification step, the speed of rotation of said sectors is matched to the time for carrying out a transfer of communication from one sector to another.

10. Device for the distribution of communications established by radio-communication terminals, within a cell of a radio-communications network, characterized in that it  
20 implements means of modifying, by rotation, the orientation of the sectors of said cell.

11. Base station (12) for a cell of a radio-communication network, characterized in that it implements a method of distributing communications according to any one of Claims 1 to  
25 9 and/or in that it comprises a device according to Claim 10.

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